

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process for production of a supported catalyst that is used for a reaction in which acetic acid is obtained from ethylene and oxygen comprising the following steps in order:

First step

A step of impregnating thea carrier with a solution containing (a) at least one compound which comprises at least one element selected from the group consisting of Group 8, 9 and 10 elements of the Periodic Table (hereinafter referred to as “(a) group compound”), to obtain an impregnated carrier (A)

Second step

A step of contacting the impregnated carrier (A) with an alkaline substance and (b) a compound containing at least one element selected from amongthe group consist of gallium, indium, thallium, germanium, tin, lead, phosphorus, arsenic, antimony, bismuth, sulfur, selenium, tellurium and polonium (hereinafter referred to as “(b) group compound”) to obtain an impregnated carrier (B) (where the alkaline substance and the (b) group compound are contacted simultaneously or separately in order with the impregnated carrier (A))

Third step

A step of contacting the impregnated carrier (B) with a reducing substance to obtain a supported catalyst (C).

2. (currently amended): The process for production of a supported catalyst according to claim 1, which further comprises a step of loading on the carrier (c) at least one compound selected from the group consisting of heteropolyacids and/or and their salts.

3. (currently amended): The process for production of a supported catalyst according to claim 1, which further comprises a step of contacting the carrier with (d) at least one compound selected from compounds which contain at least one element selected from the group consisting of Group 11 and 12 elements of the Periodic Table and chromium (hereinafter referred to as “(d) group compound”).

4. (currently amended): The process for production of a supported catalyst according to claim 1, wherein the (a) group compound is a compound containing at least one element selected from the group consisting of ruthenium, osmium, rhodium, iridium, palladium and platinum.

5. (currently amended): The process for production of a supported catalyst according to claim 1, wherein the (b) group compound is a compound containing at least one element selected from the group consisting of gallium, germanium, tin, lead, bismuth, selenium and tellurium.

6. (currently amended): The process for production of a supported catalyst according to claim 2, wherein the polyatom of the (c) heteropolyacid and/or and its salt is tungsten and/or molybdenum.

7. (currently amended): The process for production of a supported catalyst according to claim 2, wherein the heteroatom of the (c) heteropolyacid and/or and its salt is at least one element selected from the group consisting of phosphorus, silicon and boron.

8. (currently amended): The process for production of a supported catalyst according to claim 2, wherein the (c) heteropolyacid and/or and its salt is at least one compound selected from the group consisting of silicotungstic acid, phosphotungstic acid, silicomolybdic acid, phosphomolybdic acid and their salts.

9. (original): The process for production of a supported catalyst according to claim 3, wherein the Group 11 or 12 element of the (d) group compound is an element selected from copper, silver, gold and zinc.

10. - 12. (canceled).

13. (withdrawn): A process for production of a lower aliphatic carboxylic acid, comprising using a supported catalyst according to claim 12 for a reaction in which a lower aliphatic carboxylic acid is obtained from a lower olefin and oxygen.

14. (withdrawn): The process for production of a lower aliphatic carboxylic acid according to claim 13, wherein the reaction between the lower olefin and oxygen is carried out in a gas phase.

15. (withdrawn): A process for production of acetic acid, comprising using a supported catalyst according to claim 12 for reaction to obtain acetic acid from ethylene and oxygen.

16. (withdrawn): The process for production of acetic acid according to claim 15, wherein the reaction between ethylene and oxygen is carried out in a gas phase.

17. (currently amended): The process for production of a supported catalyst according to claim 2, which further comprises a step of contacting the carrier with (d) at least one compound selected from compounds which contain at least one element selected from the group consisting of Group 11 and 12 elements of the Periodic Table and chromium (hereinafter referred to as “(d) group compound”).